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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,650	03/04/2002	Barry Bond	MS1-779US	6104

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EXAMINER

NGUYEN, CINDY

ART UNIT PAPER NUMBER

2161

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/090,650

**Applicant(s)**

BOND ET AL.

**Examiner**

Cindy Nguyen

**Art Unit**

2161

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This is in response to application filed on 03/04/02 in which claims 1-23 are presented for examination.

#### **1. Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

#### **2. Claims 1-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krishnan et al. (US 6141698) (Krishnan) in view of Arendt et al. (US 5708811) (Arendt).**

Regarding claim 1, Krishnan discloses: A computer-readable medium having computer-executable modules comprising:

a file locator configured to locate an executable image on a computer media (col. 6, lines 11-15, Krishnan);

a memory-mapper configured to open the executable image from the computer media and read it into a computer memory (col. 6, lines 60-65, Krishnan);

an importer configured to find a list of executable image names to load;

a binder configured to link multiple executable images together, such images being those of the list of executable image names ((col. 7, lines 48 to col. 8, lines 5, Krishnan).

However, Krishnan didn't disclose: a file-format recognizer configured to recognize the file format of the executable image from amongst a database of multiple file format definitions ;

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an exporter configured to build a representation of program modules that an executable image exports. On the other hand, Arendt discloses: a file-format recognizer (loader) configured to recognize the file format of the executable image from amongst a database of multiple file format definitions (col. 4, lines 12-18, Arendt); an exporter configured to build a representation of program modules that an executable image exports (col. 5, lines 22-30, Arendt). Thus, at the time invention was made, it would have been obvious to a person of ordinary skill in the art to include a file-format recognizer and an exporter configured to build a representation of program modules in the system of Krishnan as taught by Arendt. The motivation being to the operating system recognizes the format of executable images and executes the program modules for managing allocation of memory and loading the executable file into memory.

Regarding claim 2, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Krishnan/Arendt discloses: wherein the database is extensible so that additional file format definitions may be added to the database of multiple file format definitions (col. 6, lines 7-15, Krishnan).

Regarding claim 3, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Krishnan/Arendt discloses: wherein the importer is further configured to direct the loading of multiple executable images of the list of executable image names to load (col. 6, lines 66 to col. 7, lines 2, Krishnan).

Regarding claim 4, all the limitations of this claim have been noted in the rejection of claim 1 above. In addition, Krishnan/Arendt discloses: wherein the file-format recognizer is

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further configured to select one or more of a group of available pluggable sub-loaders is capable of loading the recognized file format of the executable image (col. 6, lines 58-65, Krishnan).

As per claims 5, 6 and 7, all the limitations of these claims have been noted in the rejection of claim 1. It is therefore rejected as set forth above.

Regarding claim 8, Krishnan/Arendt discloses: A computer-readable medium having computer-executable modules comprising: a searcher configured (injection mechanism) to search a computer media (space) for an executable image (301, fig. 3, Krishnan) for loading (col. 7, lines 22-27, Krishnan);

a format recognizer configured to the format of the executable image (col. 6, lines 20-27, Krishnan);

a memory-mapper configured to load and map the executable image into memory based upon the format of the executable image (col. 6, lines 60-65, Krishnan);

a sub-loader configured to examine a data structure of the executable image to determine whether to load additional images (col. 7, lines 60 to col. 8, lines 1, Krishnan);

a database of multiple executable-image formats which is the basis for which the recognizer recognizes the format of executable image (col. 4, lines 12-18, Arendt) and for which the memory-mapper varies how it loads and maps the executable image into memory (col. 4, lines 66 to col. 5, lines 5, Arendt).

Regarding claim 9, all the limitations of this claim have been noted in the rejection of claim 8 above. In addition, Krishnan/Arendt discloses: wherein the database is extensible so that

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additional executable-image formats may be recognized by the recognizer (loader) and loaded and mapped by the memory-mapper (col. 4, lines 12-18, Arendt).

Regarding claim 10, all the limitations of this claim have been noted in the rejection of claim 8 above. In addition, Krishnan/Arendt discloses: wherein one or more modules the medium are configured to be replaced with a replacement module without recompilation of one or more modules (col. 8, lines 9-21, Krishnan).

Regarding claim 11, all the limitations of this claim have been noted in the rejection of claim 8 above. In addition, Krishnan/Arendt discloses: wherein the memory-mapper is further configured to convert the executable image before mapping it into the memory (col. 7, lines 64 to col. 8, lines 5, Krishnan).

Regarding claim 12, all the limitations of this claim have been noted in the rejection of claim 8 above. In addition, Krishnan/Arendt discloses: wherein the memory-mapper is further configured to decrypt the executable image before mapping it into the memory (col. 4, lines 48-55, Krishnan).

As per claims 13, 14 and 15, all the limitations of these claims have been noted in the rejection of claim 8. It is therefore rejected as set forth above.

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Regarding claim 16, all the limitations of this claim have been noted in the rejection of claims 1 and 8. It is therefore rejected as set forth above. In addition, Krishnan/Arendt discloses:

investigating information related to the executable image, thereby identifying the format of the executable image (col. 4, lines 37-55, Krishnan);

Regarding claim 17, all the limitations of this claim have been noted in the rejection of claim 16 above. In addition, Krishnan/Arendt discloses: wherein during the investigating an extensible database of executable-image formats is accessed (col. 4, lines 61-63, Krishnan).

Regarding claim 18, all the limitations of this claim have been noted in the rejection of claim 16 above. In addition, Krishnan/Arendt discloses: wherein headers of the image contains the information related to the executable image for the investigating (205, fig. 2, Krishnan).

As per claims 19 and 20, all the limitations of these claims have been noted in the rejection of claim 8. It is therefore rejected as set forth above.

Regarding claim 21, all the limitations of this claim have been noted in the rejection of claims 1 and 2 above. It is therefore rejected as set forth above.

Regarding claim 22, all the limitations of this claim have been noted in the rejection of claim 21 above. In addition, Krishnan/Arendt discloses: wherein the modularized sets of instructions are isolated with clean interfaces (col. 4, lines 47-55, Krishnan).

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As per claim 23, all the limitations of this claim have been noted in the rejection of claim

21. It is therefore rejected as set forth above.

### **3. *Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cindy Nguyen whose telephone number is 571-272-4025. The examiner can normally be reached on M-F: 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and 703-872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.



Cindy Nguyen

October 27, 2004



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